## **AMENDMENTS TO THE CLAIMS**

- (Currently amended) Novel-An isolated oligonucleotide primers having-consisting essentially
  of a polynucleotide having the nucleotide sequence of SEQ ID NO: 1, SEQ ID NO: 2,
  SEQ ID NO: 3 and or SEQ ID NO: 4 for amplification of the kinesin-related gene of
  Leishmania species.
- 2. (Currently amended) A method for detecting and differentiating visceral leishmaniasis (VL) and post kala-azar-dermal leishmaniasis (PKDL) causing strains of *Leishmania donovani* in a sample, the said method comprising the steps of:
  - a) isolating DNA from a sample;
  - b) amplifying the target region from a desired region of the DNA of isolated in step

    (a) using novel—oligonucleotide primers having—consisting essentially of a

    polynucleotide having the nucleotides sequence of SEQ ID NO: 1, SEQ ID NO:

    NO: 2, SEQ ID NO: 3 and SEQ ID NO: 4, and heat stable DNA polymerase, to
    obtain amplified fragments;
  - c) separating the amplified fragments of <u>obtained in step</u> (b) to obtain a separation <u>pattern;</u> and
  - d) analyzing the fragments of step (e) to detecting and differentiateing VL and PKDL causing strains of Leishmania donovani based by observing differences in on-the banding separation pattern of the amplified fragments.
- 3. (Currently amended) A<u>The</u> method of claim 2, wherein in step (a) the sample is either <u>a</u> clinical sample or culture sample.
- 4. (Currently amended) A<u>The</u> method of claim 3, wherein the clinical sample is selected from a group consisting of blood, bone marrow aspirate, bone marrow biopsy, splenic aspirate, splenic biopsy, liver aspirate, liver biopsy, lymph node aspirate, lymph node biopsy, skin-scrappingscraping, slit biopsy and other tissue materials.

- 5. (Currently amended) A<u>The</u> method as claimed in of claim 2 wherein in step (b) the heat stable DNA polymerase is *Taq polymerase*.
- 6. (Currently amended) A<u>The</u> method as <u>claimed in of claim</u> 2 wherein in step (b) the amplification is done by polymerase chain reaction.
- 7. (Currently amended) A<u>The</u> method as claimed in 2 wherein in step (c) the separation is done <del>preferably</del> by gel electrophoresis.
- 8. (Currently amended) A<u>The</u> method as claimed in 2 wherein in step (d) the detection is by ethidium bromide or other DNA stains.
- 9. (Currently amended) A diagnostic kit for detection and differentiation of VL and PKDL causing strains of the *Leishmania donovani*, comprising of novel-oligonucleotide primers having-consisting essentially of a polynucleotide sequence of SEQ ID NO: 1, SEQ ID NO: No: NO: 2, SEQ ID NO: 3 and or SEQ ID NO: 4, reaction buffer, *Taq polymerase*, a DNA marker, positive and negative control samples and an instruction manual.
- 10. (Canceled)